CLAIMS

1. Loading device for transferring a cargo onto a mobile loading floor, such as for instance of a vehicle, comprising a frame having a carrying surface wherein the carrying surface has a longitudinal direction and wherein the frame is also provided with support means for supporting the loading device on a ground surface, characterized in that the loading device is provided with adjusting means for aligning an outer end in the longitudinal direction of the carrying surface.

2. Loading device as claimed in claim 1, characterized in that the adjusting means comprise tilting means for tilting the carrying surface around at least one tilting axis.

3. Loading device as claimed in claim 2, characterized in that the tilting axis is substantially the longitudinal direction of the carrying surface.

4. Loading device as claimed in claims 2-3, characterized in that the tilting means are formed by the support means.

5. Loading device as claimed in any of the foregoing claims, characterized in that the adjusting means comprise sliding means for moving the carrying surface in a plane.

6. Loading device as claimed in claim 5, characterized in that the sliding means comprise two plates, wherein the plates engage movably on each other by means of a dovetail coupling.

7. Loading device as claimed in any of the foregoing claims, characterized in that the adjusting means are adapted for a height adjustment of the carrying surface relative to the ground surface.

8. Loading device as claimed in any of the foregoing claims, characterized in that the adjusting means are modified to rotate the carrying surface in a plane.

9. Loading device as claimed in any of the foregoing claims, characterized in that the adjusting means are adapted to hold the carrying surface substantially horizontal.

10. Loading device as claimed in any of the foregoing claims, characterized in that the adjusting means comprise a cylinder as driving means for the adjustment.

11. Loading device as claimed in any of the foregoing claims, characterized in that the loading device further comprises an auxiliary transport means for loading the mobile loading floor, wherein the auxiliary transport means is movable over the carrying surface, and wherein the auxiliary transport means is provided with a number of roller elements and with support means for supporting the load.

12. Loading device as claimed in claim 11, characterized in that the auxiliary transport means has moving means for moving the auxiliary transport means over the carrying surface, and the auxiliary transport means comprises a number of first roller elements arranged at a regular mutual distance for supporting a load which can be placed on the auxiliary transport means, and a number of second roller elements arranged at a regular mutual distance for displacing the auxiliary transport means over the carrying surface, wherein in a first mode the first roller elements are coupled to the moving means and in a second mode the second roller elements are disengaged.

13. Loading device as claimed in claim 12, characterized in that in the first mode the first roller

elements engage on the second roller elements, and in a second mode the second roller elements are disengaged from the first roller elements.

14. Loading device as claimed in claim 12 or 13, characterized in that the moving means comprise a number of wheels which are bearing-mounted for substantially vertical movement on the auxiliary transport means.

15. Loading device as claimed in any of the foregoing claims, characterized in that the loading device comprises coupling means for coupling the loading device to the mobile loading floor.

16. Loading device as claimed in any of the foregoing claims, characterized in that the loading device is provided with detecting means for detecting the surface of the mobile loading floor and with a control device coupled to the detecting means and the adjusting means, wherein the control device is adapted to control the adjusting means such that the carrying surface is aligned with the detected surface.

17. Loading device as claimed in claim 16, characterized in that the control device is adapted to continuously compare the surface alignment.

18. Loading device as claimed in any of the foregoing claims, characterized in that the loading device is provided with a positioning part, wherein the positioning part comprises load support means formed by at least a first sub-frame provided with a number of rollers oriented in a first direction, and a second sub-frame provided with a number of rollers oriented in a second direction, wherein the sub-frames are connected movably to the frame of the loading device.

19. Loading device as claimed in any of the foregoing claims, characterized in that the loading device is provided with at least one guide oriented substantially parallel to the longitudinal direction.

20. Loading device as claimed in claim 19, characterized in that the guide is a gear rack.

21. Loading device as claimed in claim 19 ~~or 20~~, characterized in that the loading device comprises load displacing means which are displaceable along the carrying surface while engaging on the guide.

22. Loading device as claimed in claim 21, characterized in that the load displacing means comprise a pivoting pusher.

23. Loading device as claimed in any of the claims 19-22, to the extent dependent on claims 11-14, characterized in that the drive means engage on the guide such that the auxiliary transport means is displaceable along the guide.

24. Loading device as claimed in claim 23, characterized in that the guide is connected to the auxiliary transport means.

25. Auxiliary transport means for loading and unloading cargo in a vehicle, comprising a frame provided with support means for supporting a cargo placeable on the auxiliary transport means and formed by a number of first roller elements arranged at a regular mutual distance, and moving means for moving over a surface the auxiliary transport means formed by a number of second roller elements arranged at a regular mutual distance and a number of bearing-mounted wheels connected movably to the frame.

26. Auxiliary transport means as claimed in claim 25, characterized in that the auxiliary transport means has a first mode wherein the first roller elements are coupled to the moving means, and a second mode wherein the first roller elements are disengaged from the moving means.

27. Method for transferring cargo between a mobile loading floor and a loading platform, comprising of

loading the cargo onto an auxiliary transport means, moving the loaded auxiliary transport means over the loading floor and over a carrying surface of a loading device in a longitudinal direction of said loading floor; and moving the cargo from or onto the auxiliary transport means onto or from the loading floor, wherein the method is characterized by tilting the loading floor and/or the carrying surface for the purpose of aligning the loading floor with the carrying surface.